

JAPAN

EDICT OF GOVERNMENT

In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, this legal document is hereby made available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.

JIS B 6603 (1983) (English): Safety standards for construction of routers

安

*The citizens of a nation must
honor the laws of the land.*

Fukuzawa Yukichi

併

BLANK PAGE



BLANK PAGE



JIS

JAPANESE INDUSTRIAL STANDARD

**Safety Standards for
Construction of Routers**

JIS B 6603—1983

Translated and Published

by

Japanese Standards Association

Translation without guarantee
In the event of any doubt arising, the original
standard in Japanese is to be evidence

1. Scope

This Japanese Industrial Standard specifies the safety construction, safety devices, handling instructions, inspection cards and markings relating to the routers (¹).

Note (¹) Refer to JIS B 0114.

2. Safety Construction

2.1 Frame and Bed The frame and bed shall be in accordance with the following:

- (1) The frame and bed shall be so constructed that the router can be installed securely and easily.
- (2) When the router has been rotated at the maximum speed under no load fitted with the largest usable knife (of the largest diameter and the length of cutting part), the frame and bed shall be such that no excessive vibration and noise could cause.

2.2 Table The table shall be in accordance with the following:

- (1) The table shall be so constructed that it can be fixed securely at an arbitrary position, and it is not liable to be inclined or ascended and descended unexpectedly.
- (2) The table shall be so constructed that the centre pin (or guide pin) and ruler can be installed securely.

2.3 Main Spindle The main spindle shall be in accordance with the following:

- (1) The material shall be S 45 C of JIS G 4051 or that having mechanical properties equal or superior thereto.
- (2) The spindle head shall be so constructed as not to be liable to ascend or descend unexpectedly.

Applicable Standards:

JIS B 0114-Glossary of Terms for Wood Working Machinery

JIS B 6141-Spring Collets

JIS C 3312-600 V Grade Polyvinylchloride Insulated and Sheathed
Portable Power Cables

JIS G 4051-Carbon Steels for Machine Structural Use

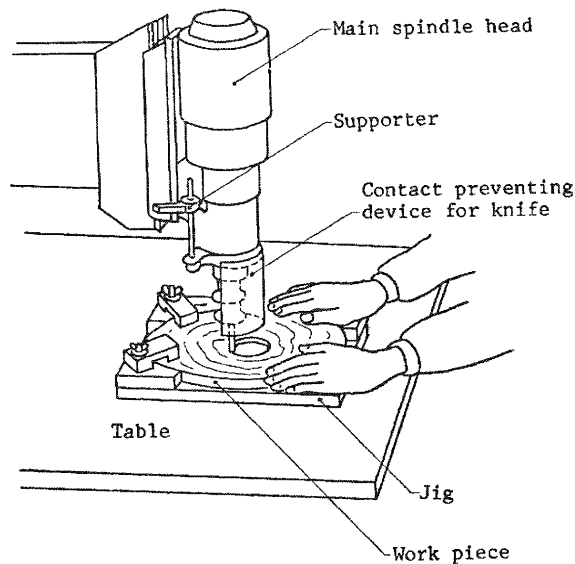
Reference Standard:

JIS B 6507-General Code of Safety for Wood Working Machinery

(1) Contact Preventing Device for Knives (See Figure)

- (a) Excluding the parts necessary for cutting the work-piece, the device shall be capable of covering 1/2 or over (operator's side) of the peripheral surface of the knives.

Figure. Contact Preventing Device of Knives



Remark: Figure gives an example, and this does not specify the construction.

- (b) The device shall be so constructed as to be adjusted easily according to the thickness of the work piece.
- (c) The device shall be that having strength of not causing camber, torsion and the like.

(2) Supporter of Contact Preventing Device of Knives

- (a) The supporter shall be that having sufficient strength for supporting.
- (b) The supporter shall be so constructed that the mounting and dismounting and the adjustment of the position of the contact preventing device for the knives can be made easily and can be fixed securely.
- (c) Bolts, nuts and others to be used for the mounting shall be provided with locking device of slip-off preventing device.

1. Scope

This Japanese Industrial Standard specifies the safety construction, safety devices, handling instructions, inspection cards and markings relating to the routers (¹).

Note (¹) Refer to JIS B 0114.

2. Safety Construction

2.1 Frame and Bed The frame and bed shall be in accordance with the following:

- (1) The frame and bed shall be so constructed that the router can be installed securely and easily.
- (2) When the router has been rotated at the maximum speed under no load fitted with the largest usable knife (of the largest diameter and the length of cutting part), the frame and bed shall be such that no excessive vibration and noise could cause.

2.2 Table The table shall be in accordance with the following:

- (1) The table shall be so constructed that it can be fixed securely at an arbitrary position, and it is not liable to be inclined or ascended and descended unexpectedly.
- (2) The table shall be so constructed that the centre pin (or guide pin) and ruler can be installed securely.

2.3 Main Spindle The main spindle shall be in accordance with the following:

- (1) The material shall be S 45 C of JIS G 4051 or that having mechanical properties equal or superior thereto.
- (2) The spindle head shall be so constructed as not to be liable to ascend or descend unexpectedly.

Applicable Standards:

JIS B 0114-Glossary of Terms for Wood Working Machinery

JIS B 6141-Spring Collets

JIS C 3312-600 V Grade Polyvinylchloride Insulated and Sheathed
Portable Power Cables

JIS G 4051-Carbon Steels for Machine Structural Use

Reference Standard:

JIS B 6507-General Code of Safety for Wood Working Machinery

2.4 Collet Chuck The collet chuck shall be in accordance with the following:

- (1) The collet chuck shall be that having performances specified in JIS B 6141 or equal or superior thereto.
- (2) The chuck nut shall be so shaped that it is not liable to entangle clothes and the like in rotation.

2.5 Ruler The ruler shall be so constructed that it can be securely mounted to the table.

2.6 Main Spindle Braking Device The braking device for the purpose of stopping the rotation of the main spindle after the power has been suspended shall be equipped.

Furthermore, it should be preferable that the braking time shall be within 10 sec.

2.7 Main Spindle Fixing Device The router shall be provided with the device by which the main spindle can be fixed while exchanging knives.

2.8 Covers The places which are afraid of danger due to contact during rotation, such rotation parts as the main spindle (excluding necessary part in work), pulleys and belts shall be provided with covers.

2.9 Operating Devices The operating devices shall be in accordance with the following:

- (1) The power breaking device shall be located at a position where the operator can operate it without leaving the working position.
- (2) The starting switch shall be so constructed as not to start unexpectedly due to contact, vibration and the like.

2.10 Restart Preventing Device The router should preferably be equipped with the device which prevents automatic start due to restoration of electric source, after the electric source has been broken by power suspension or turning the main switch "off".

2.11 Treadle Operating Device The treadle operating device shall be in accordance with the following:

- (1) The foot switch or foot valve for automatic operation shall be so constructed that it can prevent router from working due to an unexpected contact, or otherwise measures to prevent this shall be provided.
- (2) The electric source to be used for the foot switch shall be that conforming to the requirements of JIS C 3312, or that having performances equal or superior to thereto.

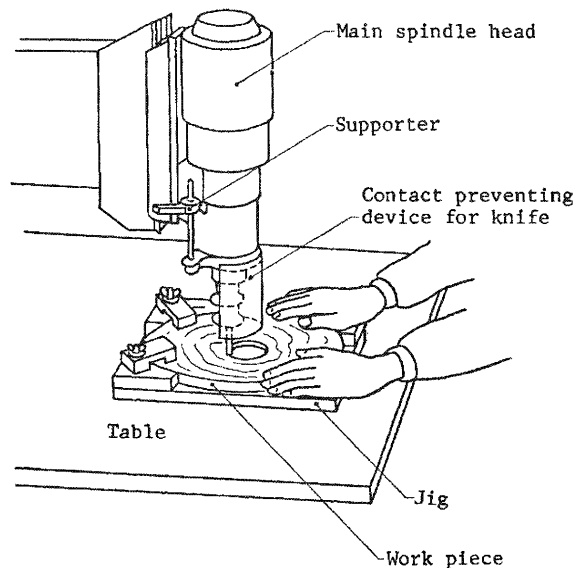
3. Safety Device

The router shall be equipped with the contact preventing device for knives as a safety device. Its construction shall be in accordance with the following:

(1) Contact Preventing Device for Knives (See Figure)

- (a) Excluding the parts necessary for cutting the work-piece, the device shall be capable of covering 1/2 or over (operator's side) of the peripheral surface of the knives.

Figure. Contact Preventing Device of Knives



Remark: Figure gives an example, and this does not specify the construction.

- (b) The device shall be so constructed as to be adjusted easily according to the thickness of the work piece.
- (c) The device shall be that having strength of not causing camber, torsion and the like.

(2) Supporter of Contact Preventing Device of Knives

- (a) The supporter shall be that having sufficient strength for supporting.
- (b) The supporter shall be so constructed that the mounting and dismounting and the adjustment of the position of the contact preventing device for the knives can be made easily and can be fixed securely.
- (c) Bolts, nuts and others to be used for the mounting shall be provided with locking device of slip-off preventing device.

4. Handling Instructions

The router shall be appended with the handling instructions, in which the required matters for securing safety, such as the type, specification, construction, tools, operations, maintenance, inspection, adjustment, installation and other matters to be attended on safety shall be stated.

5. Inspection Card

The router shall be appended with the inspection card (inspection items and results) relating to safety.

6. Marking

The router shall be marked with the following information on a conspicuous place by an indelible way:

- (1) Manufacturer's name
- (2) Year and month of manufacture and manufacture No.
- (3) Type
- (4) Rated output or rated current
- (5) Rated voltage
- (6) No load speed of rotation (for the router having a speed change mechanism, no load speed of rotation according to steps of speed change)
- (7) Maximum diameter and length of cutting part of usable knife (for the router having a speed change mechanism, these shall be marked on each step of speed change).

B 6603-1983
Edition 1

Japanese Text

Established by Minister of International Trade and Industry

Date of Establishment: 1983-01-01

Date of Public Notice in Official Gazette: 1983-01-13

Investigated by: Japanese Industrial Standards Committee

Divisional Council on Machine Tool

This English translation is published by:
Japanese Standards Association
1-24, Akasaka 4, Minato-ku,
Tokyo 107 Japan
© JSA, 1986

Printed in Tokyo by
Hohbunsha Co., Ltd.

PROTECTED BY COPYRIGHT